

Report to the General Assembly
Act 39 Round 2 Funding
Wine 2018-2019

Photo courtesy of PA Winery Association

Pennsylvania Wine Marketing and Research Program

Report submitted on behalf of the:
Pennsylvania Wine Marketing and Research Program Board
by Patrick Andrews, Chief of Agriculture Marketing
October 2021

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FROM THE PA WINE MARKETING AND RESEARCH PROGRAM BOARD CHAIRMAN

October 2021

Pennsylvania Wine Industry Stakeholder:

As chair and representative of the Pennsylvania Wine Marketing and Research Program (PWMRP) Board, and in partnership with the Pennsylvania Liquor Control Board (PLCB) and the Pennsylvania Department of Agriculture (PDA), it is my pleasure to present the Board's summary, evaluation, and highlights of projects funded through the second round of grants made through Act 39 funding.

The history of Pennsylvania wine and grape growing is older than the Commonwealth itself. When William Penn sailed from England to the New World in 1682, the hold of his ship contained a trove of Bordeaux grapevines. In 1683, those vines were planted on what is now called Lemon Hill in Philadelphia's Fairmount Park. Today, Pennsylvania has more than 300 licensed wineries and has grown into a \$1.4 billion industry. For more than 15 years, the wine and grape industry has self-invested, through industry assessments as part of the Agriculture Commodities Marketing Act (ACMA) under the PDA. On behalf of the entire industry, we are grateful for the additional support afforded by Act 39, and our board takes seriously the responsibility of reviewing and recommending the projects before you.

This report is organized by research and marketing funded projects, and provided is a summary as to the value of each project to the industry and recommendations as to whether further work in each area is warranted. Detailed final reports of each project are available by contacting the Pennsylvania Department of Agriculture's Bureau of Market Development. Our goal is to share the progress being made thanks to the investments that continue to grow the Pennsylvania wine and grape industry.

Sincerely,

Mario Mazza Board Chairman Mazza Vineyards

PA WINE MARKETING AND RESEARCH PROGRAM BOARD

WE'RE GROWING THE FUTURE OF PENNSYLVANIA'S WINE AND GRAPE INDUSTRY

The Pennsylvania Wine Marketing and Research Program is an official Pennsylvania Agricultural Commodity Marketing Board.

The vision of the Pennsylvania wine and grape industry is to be recognized as the premium East Coast wine appellation. The Pennsylvania Wine Marketing and Research Program continues to work in support of this vision by promoting an increase in the quality, profitability and consumer awareness of Pennsylvania wines. In addition, Pennsylvania's educational programs and research and marketing efforts will be of the quality and effectiveness that support and enhance our vision.

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BOARD MEMBERS As of 2021

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Jamie Williams Act 39 Appointee The Winery at Wilcox Elk County

PA WINE AND GRAPE INDUSTRY ECONOMIC IMPACT

Three hundred years ago, William Penn planted a vineyard. From that vineyard, grew an industry - with more than 300 licensed wineries producing more than two million gallons of wine each year.

Pennsylvania ranks 5th in the nation for wine production

Economic impact of more than \$1.4 billion

Tax impact of nearly \$179 million

Almost 10,000 jobs

More than \$390 million in wages

14,000 acres of vineyards

More Economic Impact and Fun Facts

- More than 2 million visitors to Pennsylvania wineries annually generate more than \$476 million in tourism revenue.
- From anywhere in Pennsylvania you're less than one hour from at least one winery.
- There are more wineries in Pennsylvania than covered bridges.

Grant Recipient: Pennsylvania Wine Marketing and Research

Program Board

Project Title: Sponsorship of the 2018 American Society

Enology and Viticulture – Eastern Section

Conference

Grant Amount: \$20,000

Project Deliverables

- Sponsorship of the 2018 American Society of Enology and Viticulture - Eastern Section (ASEV-ES)
- Final report on the conference

The PWMRP found supporting the ASEV-ES was a beneficial use of industry funds.

Project Highlights

The sponsorship also allowed for the purchase of Pennsylvania-produced wines, which were highlighted during the three-day conference. Conference attendees also had the opportunity to tour neighboring vineyards and wineries.

Project Summary

The Pennsylvania Wine Marketing and Research Program (PWMRP) Board's sponsorship of the 2018 American Society of Enology and Viticulture - Eastern Section (ASEV-ES) Chapter's annual conference (held in King of Prussia, Montgomery County) helped cover expenses for national and international wine experts to present a half-day industry-focused workshop titled "Taming High pH in the East."

The workshop aimed to educate attendees on how to manage high potassium retention in the vineyard and mitigate high potassium issues in wine during production and was attended by wine industry and academic members from across the country.

The sponsorship also allowed for the purchase of Pennsylvania-produced wines, which were highlighted during the three-day conference.

Grant Recipient: Penn State University

Project Title: Rotundone as a Potential Impact Compound

for Pennsylvania Wines

Investigator: John E. Hayes, Ph.D.

Grant Amount: \$97,321

Project Deliverables

• Final Report - December 2019

While the research team fulfilled their stated goals and further research on the topic is warranted, consumers indicated rotundone aromas were not generally regarded as a positive or desirable characteristic of wines. The PWMRP has chosen not to fund additional projects on this topic at this time.

Project Highlights

Pennsylvania consumers indicated peppery aromas associated with rotundone were not generally regarded as a positive or desirable characteristic of wines.

Rotundone is the leading aroma impact compound for pepper aroma in wine and is also present in plants and plant products such as White and Black pepper, Rosemary, Marjoram and Thyme.

Project Summary

Rotundone is the leading aroma impact compound for pepper aroma in wine and is also present in plants and plant products such as White and Black pepper, Rosemary, Marjoram and Thyme.

Researchers set out to estimate the proportion of Pennsylvanians who can smell rotundone and determine if the peppery aromas are attractive to consumers as well as gain a better understanding of how peppery aromas from rotundone may influence consumer acceptability.

Continued - Rotundone as a Potential Impact Compound for Pennsylvania Wines

Pennsylvania consumers indicated peppery aromas associated with rotundone were not generally regarded as a positive or desirable characteristic of wines.

For the general population of red wine consumers, peppery aromas are not a desirable characteristic that can be used to help differentiate Pennsylvania wines in marketing.

Up to 40% of Pennsylvania consumers cannot smell rotundone, even in high concentrations. Similar findings were true around the world - research from France and Australia has shown between 20-33% of individuals cannot smell rotundone even at very high concentrations. A survey indicated four out of 10 participants recruited in central Pennsylvania were not able to smell Rotundone in red wine.

It is important to note data does not speak to niche markets of more knowledgeable consumers who may still desire these wines. Pennsylvania wine makers should carefully consider such market segmentation when deciding whether to engage in viticultural practices that could potentially be used to modify rotundone concentrations in Noiret (red) grapes.

Anecdotal reports suggest there is a strong potential economic impact due to rotundone, with price premiums in excess of \$80 per bottle for wines high in the compound.

Grant Recipient: Penn State University

Project Title: Evaluating the Impact of Under-Trellis

Groundcover

Investigator: Michela Centinari

Grant Amount: \$51,978

Project Deliverables

- Final Report 2019
- Presentation at the Ohio Grape and Wine Conference (February 2019)
- Presentation at the PWMRP Symposium (March 2019)
- Presentation at the 21st International GiESCO Meeting (Thessaloniki, Greece June 2019)

While the research team fulfilled their stated goals and further research on the topic is warranted, there is a reluctance among growers to use this method. The PWMRP has chosen not to fund additional projects on this topic at this time.

Project Highlights

There is a general reluctance among growers to consider cover crops as a method of weed control and vigor suppression. The main concerns are efficacy and labor/costs.

Growers did indicate they would be interested in utilizing ground cover in the future pending further research.

Consumers invested in local and sustainable agriculture will pay higher prices, but wine producers would need to better educate and inform consumers about their farming practices.

Continued - Evaluating the Impact of Under-Trellis Groundcover

Project Summary

The primary goal of this multi-year project was to implement weed control practices in vineyards that reduce herbicide use while increasing the profitability of growing premium quality grapes in Pennsylvania.

Field study work was conducted on three different red wine grape types or cultivars: Marquette, Noiret, and Merlot. The trials on the Marquette and Noiret were conducted at the Penn State Agricultural Research Center (Rock Springs, Centre County) on vineyards planted in 2015, and Merlot research took place at Waltz Vineyards Estate Winery (Manheim, Lancaster County).

In the Marquette plot, the research team did not have to spray herbicide all season but the cover crop did not adversely affect vine vigor due to the abnormally wet growing season. In the Noiret plot, the cover crop was successful at reducing vine vigor but did not adversely affect Nitrogen uptake in the plant. The difference was more pronounced based on the specific root stock. Finally, in the Merlot plot, the cover crop was unable to fully establish and there was no difference in pruning weight between vines growing with or without under-trellis cover crops.

It is also important to note the study was not able to be replicated in 2019 at the Merlot site due to extensive winter damage.

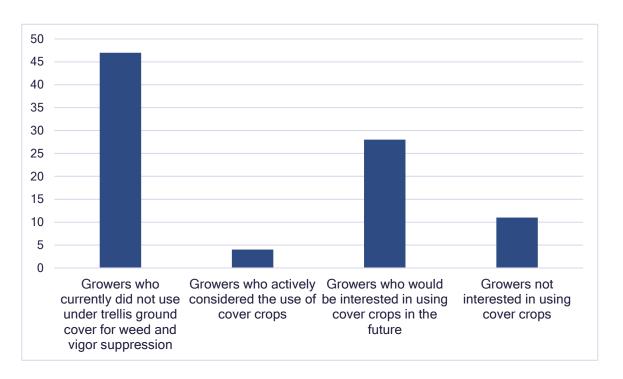
Researchers also wanted to:

- Identify challenges faced by Pennsylvania grape growers in managing weeds and excessive vine vigor and barriers preventing them from adopting alternative under-trellis management practices.
- Determine consumer awareness and interest in buying and consuming wines produced with both herbicides and under-trellis cover crops, as well as pinpoint and identify consumer segments that are willing to pay a price premium for Pennsylvania wines produced from grapes grown using under-trellis cover crops.
- Advise industry members on marketing strategies they can use to inform consumers about the potential benefits of planting under-trellis cover crops and why these wines command a higher retail price, based on consumer survey outcomes.

Research found consumers are generally willing to pay a premium for crops grown sustainably. That willingness, however, did not necessarily extend to wine purchases. Consumers that are invested in local and sustainable agriculture will pay those higher prices, but the wine producers would need to better educate and inform consumers about their farming practices.

Continued - Evaluating the Impact of Under-Trellis Groundcover

Survey Results of 49 Wine Grape Growers



Findings Grower Survey

- Many growers voiced concern that planting under trellis ground cover would increase labor time and costs.
- Growers were concerned about weed control and soil health when comparing under trellis cover crop vs traditional weed control methods.
- Some growers would consider ground cover based on consumer preferences for reduced pesticide use.
- Growers would change their current practices to utilize cover crops if the practice reduced costs and labor and improved vine health/grape quality.

Grant Recipient: Cornell University

Project Title: Screening Soil Microbial Stimulators for

Potential Effectiveness in Northeast

Pennsylvania Vineyards

Investigator: Justine Vanden Heuvel

Grant Amount: \$14,025

Project Deliverables

- Final report on survey
- Publication in the Penn State Wine and Grape Team newsletter
- Publication in the Cornell Veraison to Harvest newsletter

While the research team fulfilled their stated goals and further research on the topic is warranted, the PWMRP has chosen not to fund additional projects on this topic at this time.

Project Highlights

Anecdotal reports from the grape and wine industry suggest microbial stimulators can provide a benefit to vines, none have been systematically tested in Northeast Pennsylvania vineyards.

Researchers set out to prove treating soil with microbial stimulators would enhance vine health by increasing the amount of Arbuscular Mycorrhizal Fungi (AMF) in the roots in a greenhouse setting.

Project Summary

Researchers set out to prove treating soil with microbial stimulators would enhance vine health by increasing the amount of Arbuscular Mycorrhizal Fungi (AMF) in the roots in a greenhouse setting.

Continued - Screening Soil Microbial Stimulators for Potential Effectiveness in Northeast Pennsylvania Vineyards

Grapevines benefit from a symbiotic relationship with AMF. Together they form mycorrhizae, which play an important role in vine health, grapevine nutrition, and water relations. A range of products - generally referred to as soil microbial stimulators - are sold with the goal of encouraging the formation of mycorrhizae, a type of fungus.

While anecdotal reports from the grape and wine industry suggest these products can provide a benefit to the vine, none have been systematically tested in Northeast Pennsylvania vineyards.

The research team set out to screen products for further testing in vineyards. They initiated a greenhouse trial in 2019, using potted vines of Cabernet Sauvignon (own-rooted) and the rootstock 3309C (low to moderate vigor to grafted vines and good candidate for high density plantings; thought to ripen fruit early). Researchers decided to use only products containing the species Glomus, as it has been shown to improve AMF formation on other crops. Many biofertilizers are sold that do not contain Glomus; in this experiment, five commercial biofertilizers were compared to a control.

The study showed all five products tested increased the proportion of roots colonized by AMF. In general, the biofertilizers increased the dry weight of shoots, roots, and trunk in the vines, likely as a result of increased nutrient content in the leaves. Most micro and macronutrients were increased in concentration in the treated vines.

Grant Recipient: Penn State University

Project Title: Boosting Polyfunctional Thiols and Other

Aroma Compounds in White Hybrid Wines

Through Foliar Nitrogen and Sulfur

Application

Investigator: Ryan Elias

Grant Amount: \$101,543

Project Deliverables

• Final report from 2019

The PWMRP believes the study was well executed and results were clearly stated. However, given the poor growing conditions during the study timeframe, further research into this technique is warranted.

Project Highlights

The 2018 harvest season was abnormally wet and humid. Rot was observed in virtually every cluster harvested and sugar content was much lower than typically observed for a late September picking date. These factors may have had a larger impact on the quality of the juice and wine than the foliar spray plan.

Project Summary

Researchers set out to determine if increasing polyfunctional thiols (sulfur-containing organic compounds in wine that contribute to fruit aromas) and other aroma compounds in white hybrid wines through foliar (leaf) nitrogen and sulfur application had effects on the quality of juice and wine.

Work in Europe and the United States has shown concentrations of these important compounds can be increased by foliar nitrogen and sulfur spraying.

Continued - Boosting Polyfunctional Thiols and Other Aroma Compounds in White Hybrid Wines

The research team chose Traminette (hybrid, white grape variety) as the research cultivar because it's popular, commercially significant, and well suited to Pennsylvania's climate. Traminette juice and wines are characterized by high levels of the varietal substances terpinols linalool, geraniol, and nerol, which are all linked with floral aromas and flavors. The study aimed to characterize the effects on viticultural, chemical, and sensory properties of foliar nitrogen and sulfur sprays versus a control.

Important facts about Nitrogen

- Essential mineral for plant growth, metabolism, and health, and commonly applied by soil and/or foliar (leaf) treatments.
- Early season shoot growth is heavily dependent on reserve nitrogen and by the beginning of bloom, reserves are often depleted.
- Bloom through véraison (onset of grape ripening) and post-harvest periods are the two
 critical demand periods for vine nitrogen uptake and the most successful time periods
 to supply Nitrogen, mainly through soil application.

High levels of nitrogen in grapevines is associated with higher levels of glutathione (an antioxidant produced in cells) and cysteinylated aroma precursors, which are associated with the aromas of grapefruit, passion fruit, and black currant.

During the 2018 growing season the team treated four blocks of Traminette at a Centre County vineyard. The four blocks consisted of plants sprayed with:

Control	No foliar spray other than normal sulfur application for disease management
Treatment 2	Nitrogen applied as two equal foliar applications around veraison
Treatment 3	Sulfur applied as two equal foliar applications around veraison
Treatment 4	Nitrogen applied as two equal foliar applications

At harvest time, the team hand-picked fruit from each block and made wine with identical processes. The juice and resulting wines were analyzed for chemical parameters and volatile aroma compounds. The resulting wine then underwent a sensory analysis at the Sensory Evaluation Center at Penn State University to determine whether regular consumers could differentiate the wines from the different treatment groups. Analysis of the juice chemistry and volatile aroma compounds showed no significant differences between the spray groups. Consumers in the sensory panels could not differentiate between the groups either. These outcomes suggest foliar applications did not affect final wine quality.

Grant Recipient: Penn State University

Project Title: Defining Regional Typicity of Grüner Veltliner

Wines

Investigator: Michela Centinari

Grant Amount: \$195,622

Project Deliverables

- Final report February 2020
- Preliminary results presented at the PWMRP symposium February 2019
- Presentation to American Society of Enology and Viticulture (ASEV) - Eastern section conference July 2019
- Presentation to American Chemical Society National Meeting August 2019

The PWMRP finds the study was well executed and the results were clearly stated. The Board looks forward to further refinement of the data in Year 2.

Project Highlights

This project was year one of a multi-year study. Researchers began to categorize the similarities and differences in Grüner V grown in different geographic regions of the Commonwealth.

The overarching goal of the study was to characterize the environmental, viticultural and sensory factors that drive typicity of Grüner V wines across the state and to develop marketing strategies that best appeal to current and potential Grüner V wine consumers.

Continued – Defining Regional Typicity of Grüner Veltliner Wines

Project Summary

The research team undertook an ambitious multi-disciplinary and multi-year study on Grüner Veltliner (Grüner V), an aromatic white wine. In year one of the project researchers began to categorize the similarities and differences in Grüner V grown in different geographic regions of the Commonwealth.

The overarching goal of this study was to characterize the environmental, viticultural and sensory factors that drive typicity of Grüner V wines across the state, and to develop marketing strategies that best appeal to current and potential Grüner V wine consumers. The goal of the study was to increase Grüner V recognition as one of the signature wine varieties that can be grown and produced throughout Pennsylvania.

Researchers set out to:

- Conduct a multi-site study to identify the relationships among viticultural variables, grapevine physiology, environmental conditions, and volatile and non-volatile flavor compounds in Grüner V wines.
- 2. Characterize wines made from PA-grown Grüner V through basic wine chemistry, sensory and compositional analyses, including volatile and non-volatile flavor profiling.
- 3. Identify barriers (perceived and actual) grape growers and winemakers feel prevent them from growing and producing Grüner V. This information will then direct researchers when developing future research and extension focuses.
- 4. Provide marketers, retailers, and intermediaries with consumer profiles (wine preferences, generation, gender) who are likely to purchase and consume Grüner V.
- 5. Develop recommendations to assist wine growers and producers in identifying specific flavor compounds that contribute to or detract from perceived Grüner V wine quality.

Continued – Defining Regional Typicity of Grüner Veltliner Wines

Field Study Sensory Analysis

Environmental (weather, soil) and viticultural (vine nutrient and water status, vine vigor and yield components) measurements collected

Weather stations were placed to monitor real time environmental conditions

Researchers set-up nine experiment sites in vineyards (located in various geographic locations) commercially growing Grüner V

A total of 30-40 vines were selected and underwent the same viticultural practices to minimize external variables Grapes were harvested
September 14 - 28, 2018.
Measurements taken: cluster
weight and clusters per vine; berry
analysis and size; vine vegetative
growth; and yield per vine

Findings Vine yields and growth

- Yield per vine, vine vegetative growth, and crop load varied greatly between the sites as a factor of vine spacing, environmental differences, vigor potential of sites, and canopy management.
- Differences are also attributable to crop loss due to rot pressure during the abnormally wet growing season in 2018.

Findings Weather conditions

- Not surprisingly, seasonal weather conditions varied across the state vineyards in Erie were the driest sites, and vineyards in the Southeast and North Central Regions were the warmest
- Within and between seasons weather variation is preferred for the purpose of this study. It will allow researchers to establish stronger correlations between weather parameters and wine aroma and flavor compounds

Continued – Defining Regional Typicity of Grüner Veltliner Wines

At the end of the study, researchers will use three-year weather data to evaluate which and how weather parameters drive specific flavor and aroma in Grüner V wines made from different grape growing regions of the Commonwealth.

Findings Harvested grapes and resulting wines

- Grapes were transported to Penn State University and put into cold storage and processed the day after harvest
- Wines were made using a standard protocol to reduce differences attributable to different winemaking practices
- The resulting wines were analyzed for basic wine chemical analysis before bottling to ensure stability in the bottle. After cold stabilization, wines were bottled in December 2018

Wines also were analyzed for aroma compounds, color profile, and total phenolic concentration, and then underwent sensory analysis by a panel trained on identifying appearance, aroma, taste, and flavor attributes present in the Grüner V wines.

Findings Wine sensory analyzation

- Sensory analysis showed that for the most part the majority of samples grouped by region.
- Panelists were able to determine differences in wine from the different regions (differences will be further defined and categorized in year two of the study)
- Preliminary results of wine aroma chemistry showed no regional differences that were statistically significant.
- Sensory analysis did show some regional differences. Wines from the southeast vineyards had more thiol (sulfur compound that smells fruity in tiny amounts, but in larger amounts, smells like garlic) and flavor; wines from the north central region were perceived as more sour than the other samples.
- The color data was still being compiled at the publishing of the final report and will be included in the year two final report.

Continued – Defining Regional Typicity of Grüner Veltliner Wines

Consumers

The research team also performed focus groups with white wine consumers to determine the market viability and consumer attitudes towards Grüner V and invited white wine drinkers to participate in a focus group to understand their level of familiarity with Grüner V and issues with tasting and buying a wine not consumed before.

In the focus groups (six and five people respectively) participants tried some Pennsylvania Grüner V and then discussed the cultivar (a grape variety selectively cultivated) and their general impressions of the variety - prior to - and after - trying the wine.

Findings

Consumer Focus Groups

- Most of the participants enjoyed the wines tried.
- Many indicated the name of the wine is hard to pronounce and that may turn some consumers away.
- Most of the consumers did not have much exposure to Grüner V.

Grower Survey

The grower survey portion of the project set out to determine grower attitudes about Grüner V, and determine who currently grows, or gauge those who might be interested in planting, Grüner V. The team found mixed reception of Grüner V by growers throughout the state. The survey also documented who has grown Grüner V in the past, but no longer do, and why.

Findings

Grower Survey

- Many growers are reluctant to grow Grüner V because of the perceived lack of marketability and difficulty growing the cultivar. Coincidentally, growers of Grüner V responded the major issues they have encountered while growing the variety are the same reasons the non-growing group is hesitant to grow the cultivar.
- Survey results show roughly half of the growers are not currently growing, and do not plan to because of the perceived difficulty in marketing the grapes and wine and questions about the cold hardiness and disease management of the cultivar.

Coincidentally respondents to the survey who are currently growing Grüner V list the same issues (difficulty in marketing grape/wine and cold hardiness/disease management) as the main issues they dealt with while growing the cultivar.

FUNDED PROJECTS - MARKETING

Grant Recipient: Pennsylvania Winery Association

Project Title: Pennsylvania Wine Land Statewide

Marketing and Promotions

Project Coordinator: Jennifer Eckinger

Grant Amount: \$519,000 (PLCB) \$30,500 (ACMA)

Project Deliverables

- Increased brand impressions and audience reach
- Completion of PA Wine Trail grant projects

The PWMRP found the Pennsylvania Wine Land Statewide Marketing and Promotions successfully advertised and educated consumers about Pennsylvania wines and contributed significantly to increased statewide wine sales and wine-based tourism.

Project Highlights

The three categories of projects related to the grant were for PA Wine Land marketing and promotions, Pennsylvania wine month, and Pennsylvania Wine Trail grants. All projects were aimed at evolving and expanding consumer audiences in Pennsylvania and surrounding states.

Project Summary

The significant support of the Pennsylvania Wine Marketing Research Program (PWMRP) Board in 2018, and 2019, has generated competitive momentum for the Pennsylvania Wines brand and industry as they approach a new decade in PA Wines history.

FUNDED PROJECTS - MARKETING

Continued – Pennsylvania Wine Land Statewide Marketing and Promotions

Consumer access to and sales channels for local wines in Pennsylvania and surrounding states continue to evolve and expand. Neighboring states like New York, Virginia, and Ohio continue to significantly increase their investments in local and craft beverage marketing, aided by state tourism and economic development offices. It is essential to promote PA wines through various avenues for PA wines/wineries to remain competitive.

The three categories of projects related to this grant are for:

- PA Wine Land Marketing and Promotions
- Pennsylvania Wine Month
- Pennsylvania Wine Trail Grants

Funding Breakdown

Project	Amount
"Made in PA Wine Land" advertising	\$200,000
Public and media relations	\$80,000
New consumer outreach	\$65,500
"The PA Wine Land Post" content	\$50,000
marketing	
PA Wine Month advertising and	\$15,000
placements	
PA Wine Month event and production	\$10,000
PA Wine Trail Grants	\$110,000
Total	\$530,500

PA Wine Land Advertising and Promotions

"Made in PA Wine Land" multi-media advertising and promotions reached all 67 Pennsylvania counties and all surrounding states, as well as Virginia and Washington, D.C. The advertising included digital, video, print, and social media, and email promotions.

Using an integrated multi-media marketing campaign comprised of digital, content, video, print, radio, and public relations, and with ongoing social media, email, and website support, the PA Wines "Made in Pennsylvania Wine Land" campaign reached millions of consumers in all regions of the Commonwealth, and key border markets in five additional states: Ohio, New York, New Jersey, Maryland, and West Virginia. Promotional efforts though paid media and advertising continued through December 2019.

FUNDED PROJECTS – MARKETING

Continued – Pennsylvania Wine Land Statewide Marketing and Promotions

The Pennsylvania Wine Association (PWA) continues to create engaging original content about Pennsylvania wines and wineries. As of this project funding date, The PA Wine Land Post, the online channel for the content, had published over 175 original "PA Wine Land Post" articles, featuring more than 200 winemakers and grape growers across Pennsylvania, as well as pairings, grape education, tasting, and purchasing tips. The content was sent via email two times a month, resided on *Pennsylvaniawine.com* and was utilized in PA Wines social media.

PA Wine Land Advertising and Promotions Delivered

Deliverables

40.9 million brand impressions through 2019, a 38% and 118% increase in advertising reach compared to previous two years, respectively.

As a result, PennsylvaniaWine.com and its many winery and wine trail profiles, events listings, and articles surpassed more than 3.5 million pageviews, a 128% increase compared to previous two years.

Figures include more than 870,000 winery and wine trail profile views and more than 660,000 wine and wine trail event views.

In October of 2018, the PWA executed Camp PennaWine, an immersion experience for media and stakeholders, in the Lake Erie Region.

- Event was limited to a small number of media, to provide a unique and intimate experience to the attendees.
- Attendees participated in vineyard tours, winery production tours and harvest activities.
- A food pairing dinner introduced the attendees to PA wines and grape varieties in a unique setting that helped to capture the experience.

Results:

- Articles appeared in the Pittsburgh Tribune Live and Table Magazine (both publications are based out of the Pittsburgh Market and have sought-after audiences).
- Follow up articles also appeared in subsequent months.

FUNDED PROJECTS – MARKETING

Continued – Pennsylvania Wine Land Statewide Marketing and Promotions

PA Wine Month

In 2018 PWA Partnered with the Pennsylvania Liquor Control Board (PLCB) and PA Preferred® regarding the promotion of "October is PA Wine Month." There was significant promotion of PA wines in Fine Wine & Good Spirits stores across the Commonwealth, including PA Winery Touring Guides in premium stores and tasting in regional diverse stores.

Deliverables

Two new video campaigns were launched: "Chef's Table," featured a wine specialist and a PA Preferred Chef. Videos focused on pairing various PA wines with seasonal holiday dishes.

Videos appeared on the PA Wine Land Post on pennsylvaniawine.com, and shared via pointed communications and social media. Videos were also available for the PLCB and Department of Agriculture to showcase local wines and foods.

Sommelier Judgment Day, a culinary industry focused media event, was held. Wineries could submit wines for review to Pennsylvania sommeliers, and 10 top wines were selected. Event took place in Philadelphia, and attracted media, influencers, and culinary stakeholders, helping to expose a larger audience to PA wines.

Wine Trail Grants

The PWA created a sub-grant program to fund wine trail grant projects through a 60% match for the total project. The process for selecting projects and awards was determined through an independent review committee (five individuals from tourism and agricultural entities) familiar with grant programs. All wine trails were required to provide a final report of the marketing activities executed and an accounting for their efforts.

- Seven wine trails applied for and received funding for their projects promoting the PA wine trails, wineries and the wine industry, and span across the state, representing most of the state.
- PWA communicated with the trails to ensure projects were on track.
- Funding for the projects had to be invoiced by November 30, 2019.
- Six of the wine trails completed their projects and submitted final reports.
- PWA placed advertising with AAA WORLD Magazine to promote the experience of visiting wine trails to a targeted mid- Atlantic population. The advertisements in AAA world reached the mid-Atlantic travel audience and generated requests for the PA Winery Touring Guide.

Amount Awarded: \$18,000

Amount Awarded: \$18,000

FUNDED PROJECTS – MARKETING

Continued – Pennsylvania Wine Land Statewide Marketing and **Promotions**

Completed Wine Trails Projects (listed by region)

Northwest

Lake Erie Wine Country (LEWC)

Expanded awareness of LEWC as a premier tourist destination, bringing attention to the trail/trail events as well as the region and all local wineries by use of re-development and printing of a brochure, and print, radio, and Facebook advertising.

Organizers believe they successfully increased event awareness - ticket sales for all events were increased and each event sold out.

Southwest

Southwest Passage Wine Trail

Amount Awarded: \$3,600 Project designed to create a video to further improve their online presence via their website. The video was designed to highlight the eight wineries on the wine trail.

Video was posted onto the wine trail website. They believe the video helped increase awareness of the wine trail as well as the website and the events the wine trail conducts.

Northcentral

Susquehanna Heartland Wine Trail

Amount Awarded: \$18,000 Project expanded awareness of the trail's two signature events, "A Heartland Christmas" and "March Spring Fling," by use of postcards, posters, temporary road signs, brochures, billboards, radio ads, and promotional materials.

Through printed materials as well as their marketing and advertising ads there were increased sales to the two wine events by 6.5% (from 2018).

Southcentral

Hershey Harrisburg Wine Country

Promoted the wineries of the central PA wine trail and area attractions through the use of a digital media campaign as well as regional radio buys in the Philadelphia and Baltimore areas to promote their two signature events "Sweet Sensations of May" and "Cornucopia Quest."

The marketing plan and digital and radio campaigns had a reach of 500,000 impressions and reached 7,000 listeners [via radio], all leading a call to action for their passport program.

FUNDED PROJECTS - MARKETING

Continued – Pennsylvania Wine Land Statewide Marketing and Promotions

Southeast

Berks County Wine Trail

Amount Awarded: \$12,420 Creation of a consistent year-round message promoting the wine trail by use of print, radio, social media, and billboard ads.

The wine trail had an increased number of attendees to the four main events held throughout the year. Ticket sales for the event were up to 1,450, which they attribute to the billboard ad placed on the Pennsylvania Turnpike.

Amount Awarded: \$18,000

Lehigh Valley Wine Trail

The project was designed to expand awareness and increase sales surrounding the three signature events the wine trail holds in the Fall. Funds were used for public relation support, email marketing, social media marketing, billboard and magazine ads, digital ads via google, social media ads via Facebook and Instagram, as well as marketing graphics.

The events had significantly increased attendance, which they attribute in part to their marketing plan. With their presence on social media the wine trail increased impressions on Facebook and twitter. Their TV ad also had upwards of 80,000 impressions.